The State of New Hampshire
Department of Environmental Services

NHDES

Michael P. Nolin
Commissioner

March 28, 2006

The Honorable Carl R. Johnson, Chairman
Environment and Wildlife Committee
Legislative Office Building, Room 103
Concord, New Hampshire 03301

SUBJECT: HB 1333, an act relative to solid waste reduction goals

Dear Chairman Johnson and Members of the Committee:

HB 1333, as amended by the House, seeks to clarify the manner in which the state's waste reduction goal, set forth in RSA 149-M:2, is calculated and to amend the waste management hierarchy established under RSA 149-M:3. The New Hampshire Department of Environmental Services (DES) has concerns about those portions of the bill that would amend the waste management hierarchy.

In the 1970's, the U.S. Environmental Protection Agency developed the hierarchy as a ranking of the most environmentally sound strategies for management of municipal solid waste. The EPA hierarchy listed the following strategies in declining order of disposal preference:

1. Source reduction (including reuse).
2. Recycling.
3. Composting.
4. Combustion facilities and landfills.

In developing the hierarchy, EPA did not differentiate between landfilling and incineration as disposal methods.

With very few exceptions, states, including New Hampshire, have adopted the hierarchy with some modifications to address a preference between combustion options and landfilling. Attachment I presents a random selection of state waste management hierarchies developed from an internet search. As the data in Attachment I indicates, most states have adopted the top three elements of the EPA hierarchy and have added incineration with energy recovery followed by incineration without energy recovery and lastly landfilling as preferred disposal options.

New Hampshire has adopted this majority view and codified it under RSA 149-M:3, which currently provides the following hierarchy:

1. Source reduction.
2. Recycling and reuse.
3. Composting.
4. Waste-to-energy technologies (including incineration).
5. Incineration without resource recovery.
6. Landfilling.

DES believes that the existing hierarchy of RSA 149-M:3 continues to provide the most sound strategy for managing municipal solid waste in New Hampshire so long as emissions from the combustion of waste are controlled to be protective of human health and the environment.

Combustion with energy recovery has the secondary benefit of providing electric power at a time when energy demand is projected to exceed supply and waste generation is expected to surpass landfill capacity in the near future.

Elimination of incineration and landfilling from the hierarchy will likely cause confusion with the permitting of new landfill and incineration facilities or expansion of existing facilities. RSA 149-M:11 provides, in part:

> III. The department shall determine whether a proposed solid waste facility provides a substantial public benefit based upon the following criteria:
> (b) The ability of the proposed facility to assist the state in achieving the implementation of the hierarchy and goals under RSA 149-M:2 and RSA 149-M:3.

A hierarchy that does not contain preferences with respect to incineration or landfilling would leave the state without the guidance helpful to make the RSA 149-M:11,III(b) determination

Deconstruction is defined as the recycling and reuse of salvageable materials from demolition projects. Therefore, the proposed addition of "Deconstruction" to the hierarchy is redundant since the hierarchy already contains a preference for recycling and reuse. An alternative to inclusion of Deconstruction as a separate item of the hierarch would be to include the phrase "including deconstruction" after the phrase "recycling and reuse".

DES understands that it is the role of the legislature to set forth the preferred methods of waste management in New Hampshire and that those preferences may change from time to time. However, until acceptable alternatives to landfilling and incineration are found, eliminating them from the hierarchy would serve no useful purpose.

Lastly, the committee formed by HB 517 last session to study construction and demolition debris and other waste management issues has yet to complete its work. The final committee report is due by June 30, 2006. Passage of HB 1333 may frustrate the work of this committee by limiting the options available for consideration.

DES appreciates the opportunity to comment on this bill. If you have any questions regarding this letter of testimony, please do not hesitate to call me or Anthony P. Giunta, P.G. at 271-2905.

Sincerely,

Michael P. Nolin
Commissioner

Attachment

cc: Representative James Phinizy
Senator John T. Gallus
Senator John S. Barnes
Senator Thomas R. Eaton
Senator Margaret W. Hassan

ATTACHMENT I

Random Selection of State Waste Management Hierarchies

New Hampshire:

1. Source reduction.
2. Recycling and reuse.
3. Composting.
4. Waste-to-energy technologies (including incineration).
5. Incineration without resource recovery.
6. Landfilling

Oregon:

First prevent,
Then reuse,
Then recycle,
Then compost,
Then recovery for energy,
Then dispose in landfills

New York:

a. first, to reduce the amount of waste generated;
b. second, to reuse material for the purpose for which it was originally intended or to recycle material that cannot be reused (For this purpose, composting is considered a form of recycling.);
c. third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled; and
d. fourth, to dispose of solid waste that is not being reused, recycled or from which energy is not being recovered, by land burial or other methods approved

Minnesota:

1. Waste reduction and reuse
2. Waste recycling
3. Composting of yard waste and food waste
4. Resource recovery through composting or incineration and land disposal

Missouri:

First - reduce the amount of solid waste created
Second - reuse, recycle and compost
Third - recover and use energy from solid waste
Fourth - incinerate or dispose of in a sanitary landfill

Maine:

1. Reduction of waste generated at the source, including amount and toxicity;
2. Reuse of waste;
3. Recycling of waste;
4. Composting of biodegradable waste;
5. Waste processing which reduces the volume of waste needing land disposal, including incineration; and
6. Land disposal of waste.

Connecticut:

First source reduction,
Then recycling,
Composting,
Waste-to-energy
Landfilling

Maryland:

Waste reduction is the most preferred management technique
Followed by reuse and recycling,
Then incineration with energy recovery, and,
Least preferred, landfilling

Texas:

1. Source reduction;
2. Reuse and/or recycling;
3. Treatment to destroy or reprocess waste to recover energy or other beneficial resources if the treatment does not threaten public health, safety, or the environment; or
4. Land disposal

Virginia:

1. Source reduction
2. Reuse
3. Recycling
4. Resource recovery
5. Incineration
6. Landfilling

West Virginia:

1. Source reduction
2. Recycling
3. Reuse and materials recovery
4. Landfilling

Florida:

1. Reduction at the source
2. Recycle things that can't be reduced
3. Treatment to detoxify or recover energy
4. Disposal as a last resort

Illinois:

1. Volume reduction at the source
2. Recycling and reuse
3. Combustion with energy recovery
4. Combustion for volume reduction
5. Disposal in landfill facilities